Notice of References Cited	Application/Control No. 09/535,303	Applicant(s)/Patent Under Reexamination NAMURA, YASUAKI	
	Examiner Khanh Tran	Art Unit 2631	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-5,852,784	12-1998	Ito et al.	455/552
	B	US-5,966,666	10-1999	Yamaguchi et al.	455/552
	C	US-6,014,571	01-2000	Enoki, Takashi	455/550
	D	US-6,175,746	01-2001	Nakayama et al.	455/552
	E	US-6,393,299	05-2002	Mizumoto et al.	455/552
	F	US-6,026,307	02-2000	Blom et al.	455/553
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

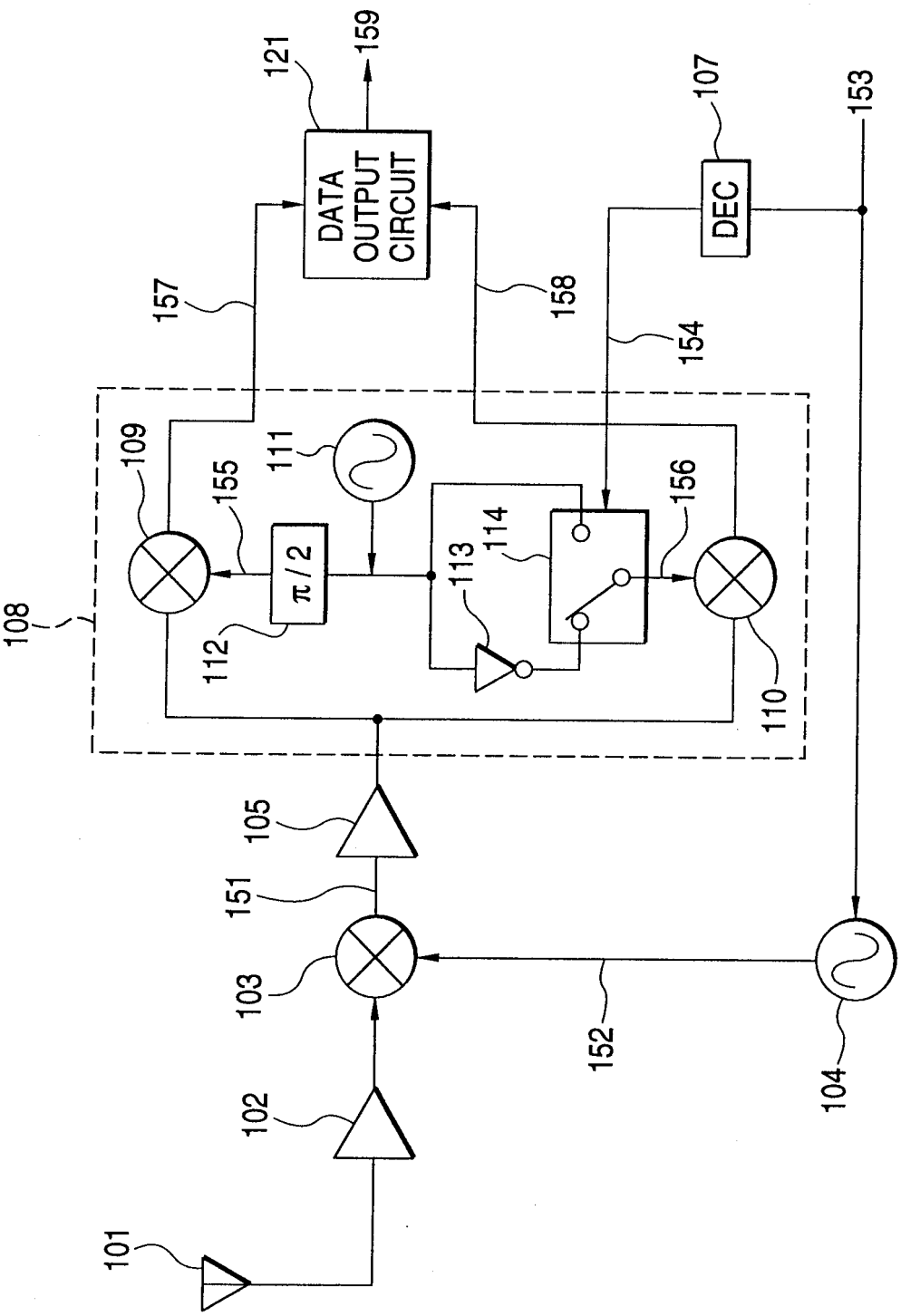
*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

FIG. 1


DATA OUTPUT CIRCUIT
DEC
π / 2
101
102
103
104
105
107
108
109
110
111
112
113
114
121
151
152
153
154
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157
158
159

the other mixer of said pair of first quadrature mixers in response to said band switching signal.

Claim 25 (canceled).

Claim 26 (currently amended): A multiband data communication apparatus which transmits signals by switching a plurality of frequency band in response to a band switching signal, said multiband data communication apparatus comprising:

quadrature modulating means for converting a quadrature transmission baseband signal into either a transmission signal or a transmission intermediate frequency signal, said quadrature modulating means including:

a pair of second quadrature mixers for converting a transmission baseband signal into either the transmission signal or the transmission intermediate frequency signal;

local oscillating means for producing a local oscillation signal; and

phase shifting means for inputting said band switching signal and for shifting a phase of said local oscillation signal based upon said band switching signal to thereby supply the phase-shifted local oscillation signal to one or both of said pair of second quadrature mixers ~~A multiband data communication apparatus as claimed in claim 2,~~ wherein

said phase shifting means supplies a signal obtained by shifting the phase of said local oscillation signal by

$\pi/2$ to one of said pair of second quadrature mixers, while said phase shifting means supplies one of said local oscillation signal and a signal obtained by inverting a code of said local oscillation signal to the other of said pair of second quadrature mixers in response to said band switching signal.

Claim ~~27~~ 21 (currently amended): A multiband data communication apparatus which transmits signals by switching a plurality of frequency band in response to a band switching signal, said multiband data communication apparatus comprising:

quadrature modulating means for converting a quadrature transmission baseband signal into either a transmission signal or a transmission intermediate frequency signal, said quadrature modulating means including:

a pair of second quadrature mixers for converting a transmission baseband signal into either the transmission signal or the transmission intermediate frequency signal;

local oscillating means for producing a local oscillation signal; and

phase shifting means for inputting said band switching signal and for shifting a phase of said local oscillation signal based upon said band switching signal to thereby supply the phase-shifted local oscillation signal to one or both of said pair of second quadrature mixers ~~A multiband data communication apparatus as claimed in claim 2,~~ wherein

COPY PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Yasuaki Namura

Serial No.: 09/535,303 Art Unit: N/A

Filing Date: March 24, 2000

Title: MULTIBAND DATA COMMUNICATION APPARATUS, COMMUNICATION METHOD OF MULTIBAND DATA COMMUNICATION APPARATUS, AND STORAGE MEDIUM

Docket No.: 32430

PRELIMINARY AMENDMENT "A"

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Please amend the above-identified application, prior to examination thereof, in the following manner.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on the date indicated below.

David E. Spaw
Name of Attorney for Applicant(s)

4/10/00 David E. Spaw
Date Signature of Attorney

IN THE SPECIFICATION:

Page 3, line 11, delete "157 and 158" and insert --155 and 156--;

line 13, delete "157 and 158" and insert --155 and 156--.

Page 6, line 17, delete "ØIF]" and insert --ØLO]--.

Page 7, line 9, delete "demodulator" and insert --modulator--.

Page 9, line 22, delete "higher" and insert --lower--.

Page 10, line 3, delete "- Q(t)sin[ωRFt + ØLO]" and insert --+ Q(t)sin[ωRFt + ØLO]--.

Page 27, line 2, delete "demodulating" and insert --modulating--.

Page 42, line 3, delete "ØIF]" and insert --ØLO]--;

line 18, delete "ØIF]}" and insert --ØLO]}--.

Page 43, line 4, delete "b(t)" and insert --b2(t)--.

Page 53, line 19, delete "154 and 158" and insert --514 and 518--.

Page 53, line 2, delete "513" and insert --514--.

Page 55, line 9, delete "154 and 158" and insert --514 and 518--.

Page 57, line 12, delete "613" and insert --603--.

Page 58, line 7, delete "[0102]"

Page 60, line 1, delete "higher" and insert --lower--.

Page 64, line 16, delete "112" and insert --612--.

Page 69, line 13, delete "data output" and insert --waveform generation--.

Page 71, line 22, delete "reception" and insert --transmission--;

line 22, delete "demodulator" and insert --modulator 1008--;

line 24, delete "(second" and insert --"(first--.

Page 72, line 9, delete "1013" and insert --1014--.

Page 73, line 5, delete "617" and insert --1017--.

Page 76, line 8, delete "609'" and insert --908'--;

line 14, delete "609" and insert --908--.

Page 78, line 23, delete "609'" and insert --908'--;

line 24, delete "609'" and insert --908'--.

REMARKS

The present amendment has been submitted to correct minor errors discovered during review of the specification. No new matter has been added by the present amendment.

Please charge any fees resulting from this communication to our Deposit Account No. 16-0820, our Order No. 32430.

Respectfully submitted,

PEARNE, GORDON, McCOY & GRANGER LLP

By _____
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April 10, 2000